

FIG. 1

SIGNAL SOURCE

FREQUENCY CONVERSION DEVICE 1

7 FREQUENCY CONVERSION DEVICE 2

(A) SIGNAL INTENSITY

(B) FREQUENCY

(C) SIGNAL INTENSITY

(D) FREQUENCY

(E) SIGNAL INTENSITY

(F) FREQUENCY (G) SIGNAL INTENSITY

) FREQUENCY

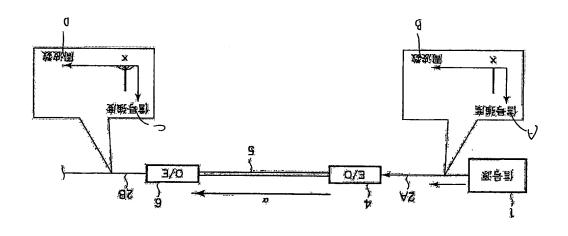


FIG. 2

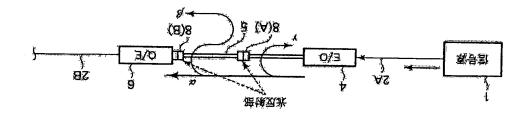
SIGNAL INTENSITY €

SIGNAL SOURCE

SIGNAL INTENSITY FREQUENCY <u>ට</u> ට (B)

FREQUENCY

OPTICAL REFLECTION PORTION



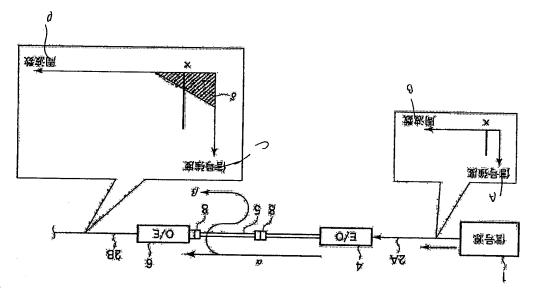


FIG. 4

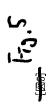
1 SIGNAL SOURCE
(A) SIGNAL INTENSITY

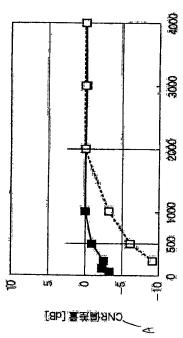
(C) SIGNAL INTENSITY

FREQUENCY

(B)

(D) FREQUENCY





CNR DEVIATION [dB]

FIG. 5

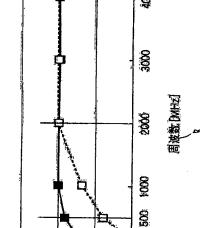
FREQUENCY [MHz]

FIG. 6 (B) €

CNR DEVIATION [dB]

FREQUENCY [MHz]

(B) €



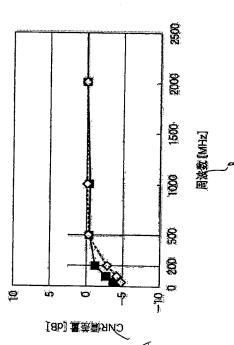






FIG. 7

SIGNAL SOURCE

FREQUENCY CONVERSION DEVICE 3

SINGLE-MODE OSCILLATION LASER

FREQUENCY CONVERSION DEVICE 4

SIGNAL INTENSITY €

FREQUENCY <u>(B</u>

SIGNAL INTENSITY

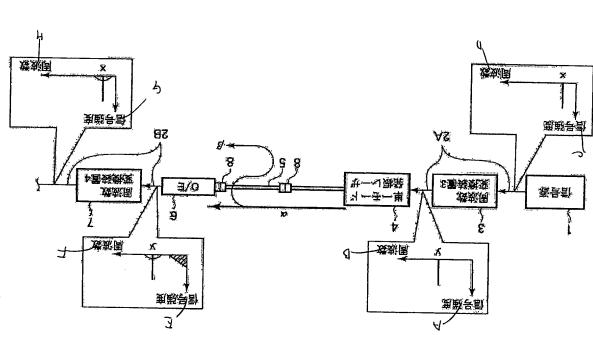
FREQUENCY <u>(</u> 0

SIGNAL INTENSITY Œ SIGNAL INTENSITY 9

FREQUENCY

Œ

FREQUENCY





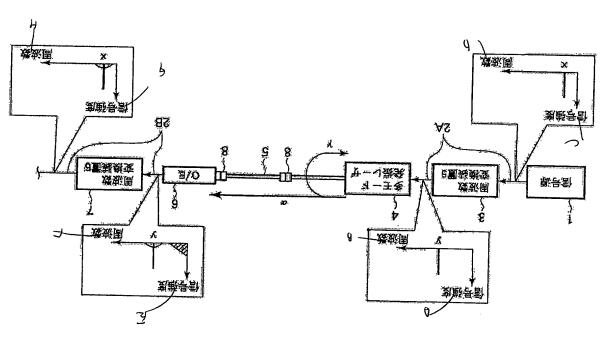


FIG. 8

SIGNAL SOURCE

FREQUENCY CONVERSION DEVICE 5

MULTI-MODE OSCILLATION LASER

FREQUENCY CONVERSION DEVICE 6

(A) SIGNAL INTENSITY

(B) FREQUENCY

SIGNAL INTENSITY

<u>O</u>

(D) FREQUENCY

(E) SIGNAL INTENSITY

(G) SIGNAL INTENSITY

FREQUENCY

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1) FREQUENCY

F2.9

FIG. 9

101 MULTIPLEXER UNIT

102 ELECTRO-OPTIC CONVERSION UNIT

103 OPTO-ELECTRIC CONVERSION UNIT

104 SPLITTER UNIT

MULTIPLIER UNIT

105

106 FREQUENCY CONVERSION UNIT

IF SIGNAL

€

(B)

NON-MODULATED SIGNAL OPTICAL FIBER

<u>0</u>

(D) NON-MODULATED SIGNAL

(E) LOCAL OSCILLATION SIGNAL (LOCAL SIGNAL)

